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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,270	12/12/2003	Masanao Yamaoka	NIT-404	8676
7590 05/18/2005 Mattingly, Stanger & Malur, P.C. Suite 370 1800 Diagonal Road Alexandria, VA 22314			EXAMINER PHAN, TRONG Q	
			ART UNIT	PAPER NUMBER
			2827	

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/733,270	YAMAOKA ET AL.	
	Examiner	Art Unit	
	TRONG PHAN	2827	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1203.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada, 5,986,924, in view of Houston, 6,611,451, Sim et al., 6,456,555, and Ohbayashi et al., 6,556,058.

Yamada, 5,986,924, discloses in Fig. 12 Prior Art a SRAM device comprising: a plurality of SRAM cells 202 each comprised of driver MOSFETs 23 and 24; transfer MOSFETs 21 and 22; and load MOSFETs 25 and 26; switch transistor 36; resistor 37.

What is not shown in Yamada, 5,986,924, is the diode-connected transistor.

Houston, 6,611,451, discloses in Fig. 1 the teaching of using diode 24 to connected the source line of SRAM array 22 to ground.

It would have been obvious under 103(a) to one of ordinary skill in the art at the time of the invention was made to modify Yamada, 5,986,924, by diode 24 in Houston, 6,611,451, for the purpose of providing a low drop out regulator device (see lines 16-20, column 2).

Sim et al., 6,456,555, discloses in Fig. 5 the teaching of using a diode-connected transistor in memory device.

It would have been obvious under 103(a) to one of ordinary skill in the art at the time of the invention was made to modify Yamada, 5,986,924, which is modified by Houston, 6,611,451, by Sim et al., 6,456,555, for the purpose of design choice.

What is not shown in Yamada, 5,986,924, which is modified by Houston, 6,611,451, and Sim et al., 6,456,555, is the resistance comprised of an n-channel MOSFET as recited in claim 4.

Ohbayashi et al., 6,556,058, discloses in Fig. 1 the teaching of using a resistance element comprised of an n-channel MOSFET 32 having its gate connected to VDD (see lines 46-51, column 6).

It would have been obvious under 103(a) to one of ordinary skill in the art at the time of the invention was made to utilize n-channel MOSFET 32 in Ohbayashi et al., 6,556,058, for resistor 37 in Yamada, 5,986,924, which is modified by Houston, 6,611,451, and Sim et al., 6,456,555, for the purpose of design choice.

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

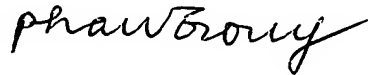
Mori et al., 6,791,354, Miyawaki, 6,324,101, Ooishi, 6,574,161, Ohbayashi, 6,373,760, and Yamauchi, 6,826,074.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TRONG PHAN whose telephone number is (571) 272-

1794. The examiner can normally be reached on M-F (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, HOAI HO can be reached on (571)272-1777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**TRONG PHAN**  
**PRIMARY EXAMINER**